

DISPLAYS

FAQ

Q What's a monitor's viewing angle, and is it important?

A Viewing angles affect LCD monitors and describe the maximum angle from which you can still see the image clearly. Monitors have both a horizontal and a vertical viewing angle. If your monitor has a horizontal viewing angle of 178°, for example, you could be practically standing next to it and still see the image clearly.

A good viewing angle generally means that people standing either side of you can see the onscreen image, which is handy if you want to use your display for watching movies or showing your photos. But even if you use your monitor alone, viewing angles are still crucial. Monitors with poor viewing angles have brighter and darker patches over the panel, which can be distracting.

If you get the opportunity to look at a monitor before you buy, make sure the picture has an even distribution of brightness and colour for all the positions from which you need to view it. If you can't get direct access, check *Computer Shopper's* reviews, which always cover viewing angles.

Lynley Oram

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NEC Multisync 20WGX2

★★★★★

£386 inc VAT



A widescreen monitor is the obvious choice for fun and games. NEC's Multisync 20WGX2 is a 20" widescreen display and part of the company's gaming line. However, its high native resolution of 1,680x1,050 provides enough desktop space to enable you to work on two documents side by side when you have to stop playing F.E.A.R. and get some work done. Sadly, the monitor doesn't have a pivot, so you can't turn the screen on its side and work on documents in portrait mode.

For the entertainment crowd, there's a lot to like. First, the 20WGX2 comes with NEC's Dynamic Visual Mode (DVM), which lets you choose from one of four predefined modes: movie, photo, text and gaming. Each preset has its own brightness, contrast and colour settings, designed to get the best picture from its input. This makes moving from an office document to a game very simple, and we were impressed with the results. You can still fine-tune your own settings using the onscreen display or NEC's NaViSet software.

DVM also has an Advanced mode, which adjusts the brightness dynamically depending on the content, raising the contrast ratio from 700:1 to 1,600:1. It worked well in our test games, especially those with dark, moody scenes.

As you'd expect from a high-end monitor, the 20WGX2 has analogue and digital inputs. Both provided a good picture, but we'd recommend using digital where possible. The 20WGX2 has a glossy coating, typical for an entertainment monitor. This helps increase image quality, contrast and colour depth, but you have to be



careful where you use the monitor, as it reflects bright light and can make the screen hard to see.

We were impressed with what we saw. Picture quality was above average, colours were vivid and rich and there were no transition problems in our colour test. Our greyscale test showed slight banding in darker areas of the image, but you're unlikely to notice this. When watching high-definition movie clips on the monitor, we were impressed with colour quality and the sharpness of images during fast-moving scenes.

The 20WGX2's viewing angles were excellent. NEC quotes 178° for vertical and horizontal viewing, and the monitor was evenly lit across the panel. You get a brilliant picture no matter where you sit, so it's perfect for watching movies with friends.

This is a quality monitor, perfectly suited to gaming and entertainment. Best of all, it's a good £40 cheaper than other 20" widescreen monitors we've reviewed.

Lynley Oram

SUMMARY

- ✓ High-quality images
- ✓ Excellent viewing angles
- ✗ Gloss coating

WIDESCREEN MONITOR 20.1"
widescreen LCD, 1,680x1,050 native resolution, 12ms response time, 700:1 contrast ratio (1,600:1 with Advanced DVM), D-sub and DVI, four port USB2 hub PART CODE 60001690
SUPPLIER www.pixmania.co.uk
DETAILS www.nec.co.uk

Also consider...

AOC LM2028

★★★★★

£376 inc VAT

PRICE CUT!



AOC's LM2028 is cheaper than many 19" screens, but its 20.1" panel doesn't just give more display space, it provides a higher resolution of 1,600x1,200, too. It also produces a decent image, although whites aren't quite as true as we would have liked. Unless you need perfect colour accuracy, though, it's a bargain.



20.1" LCD 1,600x1,200 native resolution, D-sub, DVI PART CODE TFT2090PS+
SUPPLIER www.eclipsecomputers.co.uk
DETAILS www.aocmonitor.com ✓ Decent image at a great price ✓ Minimal vertical adjustment FULL REVIEW Dec 2005

SAMSUNG LE26R51BD

★★★★★

£598 inc VAT

PRICE CUT!



Samsung's 26" HD TV possesses stunning good looks and oozes quality. It receives digital and analogue TV stations, so there's no need to use a Freeview box. Video inputs look amazing through this set, giving sharp and vibrant images. This model also has support for HD video, making it remarkable value for money.



26" LCD TV 1,360x768 resolution, HD Ready, 1x HDMI, 1x VGA, 2x SCART, 1x component, 1x S-video, headphone PART CODE LE26R51BD
SUPPLIER www.microdirect.co.uk
DETAILS www.samsung.co.uk ✓ Great picture ✓ Speakers lack bass FULL REVIEW Feb 2006

VIEWSONIC VA1912w

★★★★★

£207 inc VAT

PRICE CUT!



ViewSonic's 19" 1,440x900 resolution provides plenty of room to work and the widescreen aspect is perfect for playing games. There's a choice of digital and analogue inputs. Picture quality is decent, though the harsh banding in our greyscale test means it isn't ideal for photo editing. Still, at this price it's a bargain and an excellent choice for anyone after a large screen.



19" WIDESCREEN LCD 1,440x900 resolution, 8ms response time, 500:1 contrast ratio, DVI and D-sub inputs PART CODE VA1912w
SUPPLIER www.savastore.com
DETAILS www.viewsonic.co.uk ✓ Analogue and digital inputs ✓ Viewing angles could be better FULL REVIEW Apr 2006

EPSON EMP-TWD1

★★

£762 inc VAT

Setting up a home cinema projector can be a pain. Even with today's convenient bookshelf devices, such as Panasonic's excellent PT-AE900 (see 'Also consider...' below), you need to hook up a DVD player, audio amplifier and speakers before you can watch a movie. This is too much hassle for many, but Epson's EMP-TWD1 is considerably more convenient.

This all-in-one home cinema product incorporates a projector, DVD player and speakers in its white chassis. It is designed to sit on your coffee table in front of you. The power cable plugs into the front of the unit, out of sight, and the projector lens has shift controls so you can adjust the projected image easily.

On the rear of the unit, which faces you during use, is the DVD tray, LCD display and a headphone jack. The basic playback controls on top of the unit include one marked with a coffee cup symbol. This Break function pauses the DVD and puts an ambient backdrop on the screen. It's a nice touch, and the rest of the interface works just as well.

Image quality from the projector is great.

Colours were bright and no tweaking was necessary to get good skin tones. Lines were as well defined as we could have hoped, although the LCD technology caused some meshing between pixels, which was particularly visible when we were close to the screen.

Sadly, its resolution is only 854x480. It has a 16:9 native aspect ratio but is designed for the 480-line American NTSC TV format rather than our 576-line



PAL TV format. PAL DVDs must be scaled down to fit, losing picture detail. With such a low resolution, there's little point in connecting a PC, either.

The US-centric design extends to the inputs and outputs on the front of the unit. It lacks a SCART input, so you can't plug in most Freeview boxes to watch your favourite programmes. There are inputs for composite and S-video, though, as well as digital audio and subwoofer outputs.

Adding a subwoofer is a nice idea, but the rear mounted speakers do well on their own. They are clear, bright and loud enough to entertain you properly. They lack bass, but any vibrations in the unit could spoil the projected image.

The lamp lasts 2,000 hours at its full brightness of 1,200 lumens, sufficient for a room with subdued lighting. In darkness you can drop down to a theatre black mode that increases lamp life to 3,000 hours.

This is a well-designed and constructed device that is easy to set up and use. However, the lack of a native PAL resolution and a SCART input limits its performance and usefulness.

Seth Barton

SUMMARY

- ✓ Easy to set up and use
- ✗ Low NTSC resolution
- ✗ No SCART input

HOME CINEMA 3x 0.7" LCD, 854x480 resolution, 1,200 lumens, 1,000:1 contrast ratio
PART CODE V11H181040BU
SUPPLIER www.dabs.com
DETAILS www.epson.co.uk

CHOOSING A... Projector

Follow the steps to find your ideal specs

NATIVE RESOLUTION: 800x600
BRIGHTNESS: 1,000 ANSI Lumens
CONTRAST RATIO: 500:1
LAMP LIFE: 2,000 hours
CHECK: Weight, throw distance, noise
Recommended minimum in grey

1 Low-cost projectors make two main sacrifices. The brightness, measured in ANSI lumens, will be relatively low and the native resolution will be limited to 1,024x768. Neither need be serious drawbacks if you want to use your projector for presentations or DVDs. If you want to be ready for High Definition video, though, you'll need a projector with a resolution of at least 1,280x720 and either an HDMI or HDCP-compliant DVI port.

2 Image quality is obviously important but it is hard to assess from specifications alone. A high contrast (over 500:1) ratio adds depth to the picture and is one tangible benefit of projectors based on digital light processing (DLP) rather than the older LCD technology. The quality of the optics and colour balance can't be gauged without consulting a review, though.

3 Consider where you'll be using your projector; size and weight are important if the unit will be moved around a lot. You should aim for under 3kg if portability is an issue. Small rooms demand a quiet (sub-33dB) projector and a flexible throw distance – this tells you how close or far away the screen can be. Most projectors can mirror or rotate their image to cope with ceiling mounting or rear projection.

4 Check that the projector can cope with all the signals you might want to feed it. Common video formats are supported by almost all projectors, but high-resolution VGA signals and HDMI aren't. Highly detailed slides will display at their best only on pricier projectors with a 1,200x1,024 native resolution.

5 The brightness of the projector will depend on where you need to use it. Projectors with 1,100 ANSI lumens are fine for darkened rooms; for meeting rooms, you should get a minimum of 1,300 ANSI lumens. Remember, brighter projectors will cost more to run, as their bulbs need replacing more often. An ECO mode reduces the brightness of the projector but increases bulb life.

ACER AL1751

★★★★★
£165 inc VAT

PRICE CUT!

BEST BUY Its reflective coating makes the AL1751 display dark, rich blacks and vibrant colours. It passed all our image tests easily, and is one of the best-quality monitors we've reviewed. It has DVI and D-sub inputs, and copes well with both. With its 8ms response time it's ideal for gamers, but at this price it's a great buy for anyone.



17" LCD 1,280x1,024 resolution, 8ms response time, 500:1 contrast ratio, stereo speakers, DVI and D-sub inputs
PART CODE ET.L4008.011 SUPPLIER www.acernotebooks.co.uk DETAILS www.acer.co.uk ✓ Good picture ✗ Poor-quality speakers FULL REVIEW Feb 2006

DELL 3400MP

★★★★★
£996 inc VAT

BEST BUY Dell's 3400MP is tiny, but the 1,500 ANSI lumens is bright enough for use in a conference room. Colours were even and the brightness and contrast were excellent. It is ideal for use as a business projector. It's well priced, portable and good for presentations. It's also great if you want to take it home to watch movies.



DLP PROJECTOR 1,024x768 native resolution, 1,500 ANSI lumens, 2,100:1 contrast ratio PART CODE 305-3400MP SUPPLIER Dell 08701 524699 DETAILS www.dell.co.uk ✓ Small and light weight ✓ Low lamp running costs FULL REVIEW May 2006

PANASONIC PT-AE900E

★★★★★
£1,019 inc VAT

BEST BUY The PT-AE900e is an accomplished home cinema projector. The three-LCD projector produces stunning images. The dynamic iris gives it an excellent contrast ratio of 5,500:1. It has a native resolution of 1,280x720, so it supports 720p High Definition video. This has everything a budding home cinema user could want – at an affordable price.



LCD PROJECTOR 1,280x720 native resolution, 1,100 ANSI lumens, 5,500:1 contrast ratio PART CODE PTA900E SUPPLIER www.pixmania.co.uk DETAILS www.panasonic.co.uk ✓ Inexpensive ✓ Excellent picture quality FULL REVIEW May 2006